Clothianidin (Summary of risks from 2005 assessment) PC Code 044309

Risks to the following taxa (RQ > LOC):

- Listed small mammals (acute)
- Acute listed freshwater inverts
- Terrestrial inverts (including pollinators)

Foliar spray to grapes at 0.1 lb/A for single application; 2 applications @ 7 day intervals for maximum yearly rate of 0.2 lbs/A.

EECs for grapes at 0.1 lb/A (2 apps) = 1.07 ppb (peak), 0.916 ppb (21-d), and 0.849 ppb (60-d)

FW Fish Acute LC50 = >105 mg/L; RQ< LOC

FW Fish Chronic NOAEC = 9.7 mg/L (length and dry weight); RQ<LOC

FW invert LC50 = 0.022 mg/L (midge); **RQ = 0.048**

FW invert NOAEC = 0.042 mg/L (daphnid, reduced # juv/adult); RQ<LOC

E/M Fish LC50 = >93.6 mg/L; RQ<LOC

E/M invert LC50 = 0.051 mg/L (mysid); RQ < LOC

E/M invert NOAEC = 0.0051 mg/L (5.1 mg/L in Sect. 18; unit error?) (mysid; reduced

young/reproductive day); RQ<LOC

Duckweed EC50/NOAEC = >121, 59 mg/L

Green algae EC50/NOAEC = 64, 3.5 mg/L

Avian LC50 = >5040 ppm

Avian LD50 = 423 mg/kg

Avian NOAEC = 205 ppm (egg shell thickness in BWQ)

Mammalian LD50 = 389 mg/kg; acute 15g RQ = 0.12

Mammalian NOAEC = 150 ppm (decrease body weight and delayed sexual maturation)

Honeybee acute contact LD50 = 0.0439 ug/bee

Honeybee acute oral LD50 = 0.0037 ug/bee